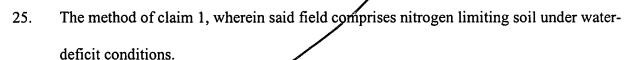
WHAT IS CLAIMED IS:

- 1. A method for enhancing nodulation of nodulating leguminous plants, wherein said plant displays resistance or tolerance to an herbicide of interest, comprising:
 - a) growing said plant in the field in the presence of a desired rhizobial strain wherein said desired rhizobial strain comprises resistance to said herbicide of interest; and
 - b) applying said herbicide of interest to said leguminous plant or seeds of said plant, whereby nodulation by the desired strain is enhanced compared to nodulation by a strain that is not resistant to the herbicide of interest.
- 2. The method of claim 1, wherein said desired rhizobial strain further comprises a superior dinitrogen fixing strain, and wherein said desired rhizobial strain displays enhanced competitiveness.
- 3. The method of claim 1, wherein said desired rhizobial strain is selected from a group consisting of Bradyrhizobium japonicum, Bradyrhizobium elkanii, Sinorhizobium fredii, Sinorhizobium meliloti, Sinorhizobium sp. NGR234, Rhizobium leguminosarum biovar viciae, R. leguminosarum biovar trifolii, R. leguminosarum biovar phaseoli, R. tropici, R. etli, Mesorhizobium loti, B. elkani and Azorhizobium caulinodans.

- 4. The method of claim 2, wherein said desired rhizobial strain is selected from a group consisting of Bradyrhizobium japonicum, Bradyrhizobium elkanii, Sinorhizobium fredii, Sinorhizobium meliloti, Sinorhizobium sp. NGR234, Rhizobium leguminosarum biovar viciae, R. leguminosarum biovar trifolii, R. leguminosarum biovar phaseoli, R. tropici, R. etli, Mesorhizobium loti, B. elkani and Azorhizobium caulinodans.
- 5. The method of claim 3, wherein said desired rhizobial strain is *Bradyrhizobium* japonicum.
- 6. The method of claim 4, wherein said desired rhizobial strain is *Bradyrhizobium* japonicum.
- 7. The method of claim 1, wherein said desired rhizobial strain is obtained by a method selected from the group consisting of selection for resistant variants produced by tissue culture or mutagenesis and genetic engineering.
- 8. The method of claim 2, wherein said desired rhizobial strain is obtained by a method selected from the group consisting of selection for resistant variants produced by tissue culture or mutagenesis, and genetic engineering.
- 9. The method of claim 7, wherein said desired rhizobial strain is genetically engineered.
- 10. The method of claim 8, wherein said desired rhizobial strain is genetically engineered.

- 11. The method of claim 1, wherein said nodulating leguminous plant is selected from the group consisting of soybean, cowpea, alfalfa, chickpea, bean, pigeonpea, sweetclover, trefoil, siratro, sweet pea, pea, vetch and clover.
- 12. The method of claim 2, wherein said nodulating leguminous plant is selected from the group consisting of soybean, cowpea, alfalfa, chickpea, bean, pigeonpea, sweetclover, trefoil, siratro, sweet pea, pea, vetch and clover.
- 13. The method of claim 11, wherein the nodulating leguminous plant is a soybean plant.
- 14. The method of claim 12, wherein the nodulating leguminous plant is a soybean plant.
- 15. The method of claim 1, wherein said herbicide of interest is selected from the group consisting of 5-enopyrubylshikimate-3 phosphate synthase (EPSPS) inhibitors, and glutamine synthetase inhibitors.
- 16. The method of claim 2, wherein said herbicide of interest is selected from the group consisting of EPSPS inhibitors and glutamine synthetase inhibitors.
- 17 The method of claim 15, wherein said herbicide of interest is an EPSPS inhibitor.
- 18. The method of claim 16, wherein said herbicide of interest is an EPSPS inhibitor.

- 19. The method of claim 1, wherein said herbicide of interest is applied according to a method selected from the group consisting of: to the plant and to seeds of said plant.
- 20. The method of claim 2, wherein said herbicide of interest is applied according to a method selected from the group consisting of: to the plant and to seeds of said plant.
- 21. The method of claim 1, wherein said desired rhizobial strain is administered by a method selected from the group consisting of application to the seeds of the plant, application to the plant, application to the locus of the plant root, and application by in-furrow spray.
- 22. The method of claim 2, wherein said desired rhizobial strain is administered by a method selected from the group consisting of application to the seeds of the plant, application to the plant, application to the locus of the plant root, and application by in-furrow spray.
- 23. The method of claim 1, wherein said herbicide of interest is applied to said plant by a method selected from the group consisting of application before administering the desired rhizobial strain, application simultaneously with administering the desired rhizobial strain, and application after administering said desired rhizobial strain.
- 24. The method of claim 2, wherein said herbicide of interest is applied to said plant by a method selected from the group consisting of application before administering the desired rhizobial strain, application simultaneously with administering the desired rhizobial strain, and application after administering said desired rhizobial strain.



- 26. The method of claim 2, wherein said field comprises nitrogen limiting soil under water-deficit conditions.
- 27. A method of enhancing dinitrogen fixation of a nodulating leguminous plant comprising:
 - a) inoculating said plant or seed of said plant with a rhizobial strain, said rhizobial strain comprising resistance to an herbicide of interest;
 - b) applying said herbicide of interest to said leguminous plants, wherein said plant is resistant or tolerant to the herbicide of interest; and
 - c) growing the leguminous plant in symbiotic relationship with the rhizobial strain.
- 28. The method of claim 27, wherein said resistant rhizobial strain enhances dinitrogen fixation as compared to a rhizobial strain which is not resistant to said herbicide of interest.
- 29. The method of claim 27, wherein said rhizobial strain is selected from a group consisting of Bradyrhizobium japonicum subspecies 1, Bradyrhizobium elkanii, Sinorhizobium fredii, Sinorhizobium meliloti, Sinorhizobium sp. NGR234, Rhizobium leguminosarum biovar viciae, R. leguminosarum biovar trifolii, R. leguminosarum biovar phaseoli, R. tropici, R. etli, Mesorhizobium loti, B. elkani and Azorhizobium caulinodans..



- The method of claim 27, wherein said herbicide of interest is selected from the group consisting of EPSPS inhibitors and glutamine synthetase inhibitors.
- 31. The method of claim 29, wherein said herbicide of choice is an EPSPS inhibitor.
- 32. The method of claim 27, wherein said leguminous plant is selected from the group consisting of soybean plant, cowpea, alfalfa, chickpea, bean, pigeonpea sweetclover, Siratro, sweet pea, pea, vetch and clover.
- 33. The method of claim 32, wherein said leguminous plant is soybean.
- 34. The method of claim 27, wherein said herbicide of interest is applied according to a method selected from the group consisting of: to the plant and to seeds of the plant.
- 35. The method of claim 27, wherein said inoculation is by a method selected from the group consisting of application to the plant, application to locus of the plant roots, application to seeds of the plant, and application by in-furrow spray.
- 36. The method of claim 27, wherein said leguminous plant is grown in nitrogen limiting soil under water-deficit conditions.
- 37. The method of claim 27, wherein the application of said herbicide of interest is by a mode selected from the group consisting of application before inoculating the plant, application

simultaneously with inoculating the plant, and application after inoculating the plant with the rhizobia.

- 38. The method of claim 27, wherein said rhizobial strain further comprises superior dinitrogen fixing strain
- 39. An herbicide resistant rhizobial strain, wherein said resistant rhizobial strain has been obtained by a method selected from the group consisting of selection for resistant variants produced by tissue culture or mutagenesis, and genetic engineering.
- 40. A plant infected by the herbicide resistant rhizobial strain of claim 39.